RAPID STERILIZATION AND VACCINE PREPARATION Abstract of the Disclosure

The invention is based on the discovery that biological and non-biological materials can be sterilized, decontaminated, or disinfected by repeatedly cycling between relatively high and low pressures. cycling can be carried out at low, ambient, or elevated temperatures (e.g., from about -40°C to about 95°C, or intermediate ranges). New methods based on this discovery can have applications in, for example, the preparation of 10 vaccines, the sterilization of blood plasma or serum, plant, animal, and human tissue, sputum, urine, feces, water, and ascites, the decontamination of military devices, food and beverage production, and the disinfection of medical equipment. The new methods can also be 15 incorporated into production processes or research procedures.

30062569.doc